



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,023	09/14/2000	Mi Young Kim	0630-11550P	9860
7590	03/20/2006		EXAMINER	
Birch Stewart Kalasch & Birch LLP P O Box 747 Falls Church, VA 22040-0747			PSITOS, ARISTOTELIS M	
			ART UNIT	PAPER NUMBER
			2656	
			DATE MAILED: 03/20/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/662,023	KIM, MI YOUNG	
	Examiner	Art Unit	
	Aristotelis M. Psitos	2656	

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 February 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1 and 3-8 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1 and 4-8 is/are rejected.
 7) Claim(s) 3 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

DETAILED ACTION

Applicant's response of 2/3/06 has been considered with the following results.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- 1 Claims 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged prior art of figure 1 and further considered with considered with JP 60-136059.

The following analysis is made:

Claim 7

A system for checking disk loading status in an optical disk driver having multiple disk loading stages, a plurality of optical sensors and a disk loading switch, comprising:	acknowledged prior art of fig. 1, see description in the specification at pgs. 1-3
means for discriminating loading status of an optical disk during multiple loading stages of the disk including determining that the values of the sensing signals outputted from the plurality of optical sensors and a disk loading switch are maintained for more than a predetermined time;	elem. 6, sensors 1,2 & loading sw
means for performing a disk-ejection operation	see JP 60-136059

Art Unit: 2656

in case that the disk has been jammed in the optical disk driver based upon the discrimination.

As analyzed above, the examiner interprets the term "conventional art" to describe figure 1 in this application as --- prior art ----.

There is no clear depiction that element 6 (microcomputer) performs ejection upon the result of the discrimination step, nor the appropriate maintaining of such for more than a predetermined time. These are considered present in the above figure 1.

JP 60-136509 discloses in this environment the ability of discriminating a status and having an eject operation performed as a result of such.

It would have been obvious to modify the base system of figure 1 with the above teaching from the JP document (see the attached English translation thereof), in order for the recognition of the condition as well as issuing an eject command. Motivation is to permit the ejection of the disk.

Since the condition(s) of the discrimination has been met, the limitation recited in the ultimate paragraph of claim 7 is met.

With respect to claim 4, the method is met when the above combined systems operate.

With respect to claim 5, the "host" is interpreted as the pc in the above figure 1.

Response to Arguments

Applicant's arguments filed 2/3/06 have been fully considered but they are not persuasive.

Applicant argues that figure 1 is not prior art. The examiner disagrees for the following reasoning.

As disclosed, this is "conventional art". In order for any information/system/method/etc. to be so identified At least the following must be present:

- a) the information in question is known by more than one individual (group of individuals) in the particular field of endeavor.
- b) a majority of individual aware of the information must agree that such information is "normal", i.e., the accepted starting point.

Hence, the examiner concludes that “conventional art”, must be known by a plurality of individuals in this art (disc loading/unloading art), and that a majority thereof accept the information as being normal, or the accepted way of doing business.

Furthermore, as stated in *In re Nomiya*, 184 USPQ 607, any figures (labeled as prior art), may be considered prior art for any purposes. The examiner maintains the previous position.

2 Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyagi et al .
The following analysis is made.

Claim 4. Aoyagi et al.

A method for checking disk loading status in an optical disk driver having a plurality of optical sensors and a disk loading switch, comprising the steps of:

see title/abstract

plural sensors – 5b, 13/10

loading switch input key 11a

photodetector – see col. 5 line 41-43

discriminating loading status of such discrimination is performed,
an optical disk during multiple loading see the description with respect to the
stages of the disk on the basis of sensing controller performing the discrimination
signals respectively outputted from the plurality of optical sensors and from the disk
loading switch for sensing whether the optical disk has been completely loaded; and

performing a disk-ejection operation in case that see col. 5 lines 1-10.
the disk has been jammed in the optical disk driver

Art Unit: 2656

based upon the discrimination.

Aoyagi discloses a disk loading system, in which detection of the record medium is performed, and absent appropriate determination of a completed condition through sensor 10 – see the description starting at col. 3 line 45 till col. 6 line 7.

As described therein, the system performs various steps in order to ensure proper (complete loading) off an inserted record medium. Although the sensors 5b and 10 are not specified as optical, at col. 5 lines 41-43, the presence of an optical detector (13) in lieu of sensor 5b is described.

Under 103 considerations, the examiner concludes that one of ordinary skill in the art could then equally replace the sensor 10 with an optical sensor. Hence, a plurality of optical sensors are present as required by the claim.

The loading switch is performed by the initiation of element 11. The disk is ejected – see col. 5 lines 1-10 for instance based upon the discrimination process outlined above. Although the system does not specify such as “jammed”, as claimed, the ejection is predicated upon the discrimination. Since the discrimination function is met, the “jammed” state must be present.

With respect to apparatus limitations of claim 6, they are present, i.e., means for discriminating and means for ejecting.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 4 and 6 as stated above, and further in view of JP 60-136059.

With respect to the limitations of claim 5, as noted in the abstract of the JP document, information of a fault in loading – i.e., the misloading of a disc, is conveyed to a “host” computer,

It would have been obvious to modify the base system as relied upon above and include a “host” processor, and conveying information thereto indicative of such a misloading fault.

Response to Arguments

Applicant's arguments with respect to these claims have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2656

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyagi et al further considered with Abe et al..

Claim 7 parallels the limitations of claim 6 with the additional limitation of:

".... loading switch are maintained for more than a predetermined time;".

There is no clear depiction of any time requirement in Aoyagi et al.

Abe et al further teaches in this environment – see col. 14 lines 4-19 the ability of having a predetermined time against which a discrimination event is measured and if such fails to meet such a time criteria, ejection follows.

It would have been obvious to modify the base system of Aoyagi et al with the above teaching from Abe et al, motivation is to permit an ejection function to occur when a predetermined time expires and hence ensuring proper ejection.

Response to Arguments

Applicant's arguments with respect to these claims have been considered but are moot in view of the new ground(s) of rejection.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyagi et al further considered with JP 60-136059.

The following analysis is made:

Claim 1:

Aoyagi et al

A method for checking disk loading status
in an optical disk driver having
a plurality of optical sensors and a disk
loading switch, comprising the steps of:

abstract/title/see col. 1 line 29-

to col. 2 line 2. & figure 1 for instance

discriminating loading status
of an optical disk during multiple loading
stages of the disk

such is performed by the
controller based upon
key input from element 11a, and sensors

on the basis of sensing signals
respectively outputted from the
plurality of optical sensors and from
the disk loading switch for sensing whether
the optical disk has been completely loaded;

transmitting information to a host connected
through an interface to the
optical disk driver in case that the disk has
been jammed based on upon the
discrimination; and

performing a disk-ejection operation
according to a disk ejection command
received from the host.

In the above analysis, the Aoyagi et al system performs a load complete function predicated upon the sensors 5b and 10 indicating such after the key section 11a is engaged. Hence the examiner concludes that although the sensors are not optical, because as further taught by Aoyagi et al, at col 5 lines 41-43, an optical sensor can be used in an alternative embodiment, that uses a plurality of optical sensors would be obvious – i.e., alternative sensors.

Furthermore, as elaborated upon in col. 3 lines 42 till col. 5 line 10, if such a condition fails to be established, discriminated, then the disc is ejected.

There is no clear indication that information is transmitted to a "host". Although the controller in Aoyagi et al can be so interpreted, the JP 60-136-59 document - see the abstract - indicates that after a discrimination status is recognized, such is transmitted to a "host". The examiner concludes that since "host" computers provide for a plethora of commands - through appropriate interfacing buses/interconnections, the ability of having the "eject" command issued by the "host" as opposed to the

controller 6 in Aoyagi et al would be obvious, i.e., a relocation of control capabilities to a "host" from an internal (stand alone) controller in a disc player.

Response to Arguments

Applicant's arguments with respect to these claims have been considered but are moot in view of the new ground(s) of rejection.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 as stated in paragraph 4 above, and further in view of Abe et al.

There is no clear depiction of any time requirement in Aoyagi et al/JP 60-136059 system.

Abe et al further teaches in this environment – see col. 14 lines 4-19 the ability of having a predetermined time against which a discrimination event is measured and if such fails to meet such a time criteria, ejection follows.

It would have been obvious to modify the base system of Aoyagi et al & JP 60-136059 with the above teaching from Abe et al, motivation is to permit an ejection function to occur when a predetermined time expires and hence ensuring proper ejection.

Response to Arguments

Applicant's arguments with respect to these claims have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the cited prior art includes the ability as recited in claim 3 (such an ability is interpreted as being a misclamped condition

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thursday 8 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psifos
Primary Examiner
Art Unit 2656

AMP